MEMORANDUM

29th May, 1961

To: STAFF AND STUDENTS OF MEDICAL GENETICS COURSE

From: J. L. FULLER AND V. A. McKUSICK

Subj.: TENTATIVE PROGRAM FOR 1961 - SHORT COURSE IN MEDICAL GENETICS

The staff for the 1961 session is as follows:

From the Roscoe B. Jackson Memorial Laboratory:

Douglas L Coleman Margaret C. Green Meredith N. Runner
John L. Fuller Allen B. Griffen Elizabeth S. Russel
Earl L. Green Nathan Kaliss Henry J. Winn

From the Johns Hopkins University:

Helen Abbey Malcolm A. Ferguson-Smith Clement L. Markert Samuel H. Boyer H. Bentley Glass Edmond A. Murphy Barton Childs Abraham M. Lilienfeld Sigmund R. Suskind Bernice Cohen Victor A. McKusick William J. Young

Visiting Staff:

Carl Cohen, Batelle Memorial Institute, Columbus John H. Edwards, University of Pennsylvania F. Clarke Fraser, McGill University Park S. Gerald, Children's Hospital, Boston Paul J. Schmidt, National Institutes of Health John H. Trentin, Baylor University

The course will meet generally from 8:30 a.m. to 12:30 p.m. with a break for coffee and informal discussion between 11:00 a.m. and 11:30 a.m. Afternoon classes will be scheduled on Monday, August 7th if the weather is favorable for a beach party on that evening. If not, the beach party will be held on the first fair day with class schedules adjusted accordingly. One afternoon session will be scheduled as a laboratory exercise in cytogenetics.

Showing of McGraw-Hill films on Genetics, and visits to sections of the Jackson Laboratory will be scheduled.

All sessions are at Oakes Center unless otherwise indicated.

SHORT COURSE IN MEDICAL GENETICS

WEEK I

	MORNING	<u>EVENING</u>
Monday, Aug. 7	Principles of genetics I. Segregation and independent assortment II. Linkage, inferences from breeding experiments	Physical basis of heredity I. Mitosis, meiosis, crossing-over
Tuesday, Aug. 8	Physical basis of heredity II. Chromosomal aberrations Allelism Pedigree patterns	Cytogenetics in man
Wednesday, Aug. 9	The chemical basis of inheritance	The hemoglobins (at Jackson Auditorium)
Thursday, Aug. 10	Chemical aspects of gene action I. Introduction II. Genetic polymorphisms of serum proteins	Tryptophane synthetase, a model of biochemical genetics
Friday, Aug. 11	Chemical aspects of gene action III. Inborn errors of metabolism	Experimental analysis of gene action, with particular reference to the mouse
Saturday, Aug. 12	Gene action: The blood groups	

SHORT COURSE IN MEDICAL GENETICS

WEEK II

	MORNING	EVENING
Monday, Aug. 14	Genes and immunity I. Biologic individuality II. Histocompatibility III. Resistance to infection	Biology of mutation I
Tuesday, Aug. 15	Genes in populations I. Equilibrium states II. Factors influencing gene frequency Biology of mutation II	Quantitative inheritance
Wednesday, Aug. 16	Genes in kindreds (Statistical methods, ascertainment biases, modes of inheritance, linkage)	Panel: Selection and evolution in man (at Jackson Auditorium)
Thursday, Aug. 17	Genes in development	Congenital malformations
Friday, Aug. 18	12 short invitation papers presenting recent works which illustrates approaches and principles in medical genetics.	